

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,799	01/31/2002	Valene Skerpac	3395	
7590 10/15/2007 Francis C. Hand, Esq. c/o Carella, Byme, Bain, Gilfillan, Cecchi, Stewart & Olstein 6 Becker Farm Road Roseland, NJ 07068			EXAMINER	
			DAVIS, ZACHARY A	
			ART UNIT	PAPER NUMBER
			2137	
			MAIL DATE	DELIVERY MODE
			10/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

m

	Application No.	Applicant(s)			
	10/062,799	SKERPAC, VALENE			
Office Action Summary	Examiner	Art Unit			
	Zachary A. Davis	2137			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status	,	·			
<ol> <li>Responsive to communication(s) filed on 31 July 2007.</li> <li>This action is FINAL. 2b) This action is non-final.</li> <li>Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.</li> </ol>					
Disposition of Claims					
<ul> <li>4)  Claim(s) 1,2 and 4-7 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1,2 and 4-7 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers					
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 23 April 2007 is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate			

Art Unit: 2137

#### **DETAILED ACTION**

- 1. A response was received on 21 March 2007. By this response, Claims 1, 2, 4, and 5 were amended. No claims were added or canceled. Claims 1, 2, and 4-7 are currently pending in the present application.
- 2. As per the Notices of Non-Compliant Amendment mailed 29 March 2007 and 12 April 2007, the amendments to the drawings with the above response and the substitute drawings received 04 April 2007 failed to comply with the requirements of 37 CFR 1.121(d), but as noted in the Notice of Non-Compliant Amendment mailed 19 July 2007, the amendments to the drawings received 23 April 2007 are in compliance with and meet the requirements of 37 CFR 1.121(d). Also, as per the Notice of Non-Compliant Amendment mailed 19 July 2007, the amendments to the specification failed to comply with the requirements of 37 CFR 1.121(b). The substitute section received 31 July 2007 is in compliance with and meets the requirements of 37 CFR 1.121(b).

## Response to Amendment

3. The supplemental reply filed on 05 April 2007 was not entered because supplemental replies are not entered as a matter of right except as provided in 37 CFR 1.111(a)(2)(ii). Further, because the supplemental reply adds new claims, it is not clearly limited to any of the situations described in 37 CFR 1.111(a)(2)(i), describing when a supplemental reply may be entered. It is further noted that the reply fails to

Art Unit: 2137

comply with both 37 CFR 1.111(b) and 37 CFR 1.121(c), noting that, first, the reply does not clearly point out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references, as required by 37 CFR 1.111(b), and further noting that Claim 4 is listed with the status of "previously presented", but the claim includes language that is underlined as though it had been added, which fails to comply with the requirements of 37 CFR 1.121(c).

4. The objection to the amendments filed 27 January 2006 and 27 February 2006 under 35 U.S.C. 132(a) as introducing new matter is withdrawn in light of the amendments to the specification (see the response received 31 July 2007) and the amendments to the drawings (see the drawings received 23 April 2007).

### Response to Arguments

5. Applicant's arguments filed 21 March 2007 have been fully considered but they are not persuasive.

Regarding the objection to the previous amendments as introducing new matter, and with particular reference to the Examiner's previous comment that "the original disclosure is entirely silent on the issue of whether the speech recognition is automatic" (see pages 3-4 of the Office action mailed 21 December 2006), Applicant's remarks at pages 7-8 of the present response are moot in light of the amendments to the specification and drawings and the above noted withdrawal of the objection.

Art Unit: 2137

Regarding the rejection of Claim 5 under 35 U.S.C. 112, second paragraph, as indefinite, and with particular reference to the statement in the previous Office action that "it is unclear how the spoken response can match both the challenge phrase and the validation" (see page 8 of the Office action mailed 21 December 2006), Applicant attempts to clarify the interpretation of the claim (page 7 of the present response). However, the Examiner notes that Applicant's remarks do not appear to address explicitly the language at issue in the rejection. In particular, the Examiner notes that, as written, the claim requires that the spoken response be verified as both matching the challenge phrase and as matching a validation. However, this is generally unclear; while it makes sense for the spoken response to be verified as to whether it matches the challenge phrase, it is not clear how the spoken response is compared with the abstract concept of a "validation" to determine a matching between the two.

Regarding the rejection of Claims 1, 2, and 4-7 under 35 U.S.C. 102(b) as anticipated by Kanevsky et al, US Patent 5897616, and specifically in reference to Claim 1, Applicant argues that Kanevsky does not disclose generation of a one-time phrase but instead generates a random question (page 8 of the present response). However, the Examiner believes that a random question is, in fact, a subset of a one-time (i.e. random) phrase, and therefore the random question in Kanevsky reads on the claimed random phrase (column 6, lines 25-29). The Examiner also notes that Applicant's example regarding the question regarding where a user attended college is conjecture for which there is no specific evidence cited, and further, is not relevant because the disclosure of Kanevsky does meet the claim language as noted above.

Art Unit: 2137

Further in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "Applicant's invention purposely avoids collecting 'identity' information", see page 8 of the present response) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Additionally in reference to Claim 1, Applicant argues that "Kanevsky does not require the user to speak the question" (pages 8-9 of the present response). In response, the Examiner notes that although the claim recites a "one-time challenge phrase... for the user to speak", the claim does not explicitly include a step in which the user actually speaks the phrase. Rather, the claim recites receiving a spoken response to the challenge phrase, and the Examiner believes that the answer to the question disclosed by Kanevsky (column 6, lines 34-37) does, in fact, constitute a spoken response to the challenge phrase as claimed.

Further in reference to Claim 1, Applicant argues that Claim 1 requires "a controller... to process said second signal for speaker recognition and... to process said second signal for speech recognition" and that "Kanevsky does not describe or teach such a structure (page 9). Applicant further asserts that Kanevsky processes the answer through ASR (i.e. automatic speech recognition) and processes a user voice sample through text-independent speaker recognition (page 9 of the present response, citing Kanevsky, column 6, line 34-column 7, line 25), and alleges that this does not

Art Unit: 2137

meet the claimed limitation. The Examiner fails to appreciate this argument, noting that the cited portion of Kanevsky clearly shows processing the second signal (representing the answer or response to the challenge) using speaker recognition (column 6, line 66-column 7, line 12, noting that column 7, lines 1-3 clearly state that the voice sample can come from the answer given to the challenge question) and speech recognition (column 6, lines 35-65, as cited by Applicant), and therefore the Examiner believes that Kanevsky clearly does disclose such a structure.

In reference to Claim 2, Applicant makes similar arguments as set forth with respect to Claim 1, although Applicant does not provide any clear evidence in relation to those arguments (see pages 9-10 of the present response).

Therefore, for the reasons detailed above, the Examiner maintains the rejections as set forth below.

# Claim Objections

6. The objections to Claims 1 and 4 for informalities are withdrawn in light of the amendments to the claims.

# Claim Rejections - 35 USC § 112

7. Regarding the rejection under 35 U.S.C. 112, second paragraph, although some of the issues of indefiniteness have been addressed, other issues specifically noted in

Art Unit: 2137

the previous Office action have not been addressed or acknowledged by the present response; further, the amendments to the claims have raised additional issues of indefiniteness. Therefore, Claims 1 and 4-6 remain rejected as set forth below.

- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 1 and 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said first data base for randomly generating a one-time challenge phrase". There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the user" in line 11 of the claim. Because there is a multiplicity of users in lines 6-7 and also a user in line 2, it is not clear to which user this is intended to refer. Further, the claim recites "said stored biometric model of said one user" in lines 15 and 17 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the user" in line 10 of the claim. Because there is a multiplicity of users recited in line 7, it is not clear to which user this is intended to refer. The claim also recites "said challenge phrase" in line 11; it is not clear whether this refers to one of the challenge phrases mentioned at lines 4-5, or to the challenge phrase of line 10. Additionally, the claim recites "the stored biometric models for validating said spoken response" in lines 14-15; the claim also recites the limitation

Art Unit: 2137

"said one of said users" in line 15, lines 16-17, and line 20. The claim further recites "said stored biometric model of said one of said users" in lines 16-17. There is insufficient antecedent basis for these limitations in the claim. Finally, in the limitation "said spoken response as matching said challenge phrase and a validation" in lines 18-19, it is unclear how the spoken response can match both the challenge phrase and the validation; in particular, it is unclear how the spoken response matches the validation itself, given that a validation is a relatively abstract concept and not a particular phrase that could be spoken.

Claim 6 is rejected due to its dependence on rejected Claim 5.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that 10. form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1, 2, and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by 11. Kanevsky et al, US Patent 5897616.

In reference to Claim 1, Kanevsky discloses a biometric security system including a station for receiving input information, which is representative of a user, from the user and generating a signal responsive thereto (column 6, lines 4-11, for example); a database having a plurality of words and language rules for generating one-time

Art Unit: 2137

challenge phrases (column 6, lines 25-29); a database having biometric models of users (column 6, lines 16-24); and a controller that receives and validates the signal as representative of the user, where the controller communicates with the database that generates one-time challenge phrases for the user to speak (column 6, lines 25-29), and communicates with the station to receive a spoken response and generate a second signal that represents the response (column 6, lines 34-37), to validate voice information by speaker recognition (column 6, line 66-column 7, line 12) and verify voice information by speech recognition (column 6, lines 35-65), and to validate the spoken response to the challenge as representative of the user if the validation by speaker recognition and verification by speech recognition succeed (column 7, lines 14-25).

Claims 2 and 7 are directed to methods corresponding substantially to the system of Claim 1, and are rejected by a similar rationale.

In reference to Claim 4, Kanevsky discloses a biometric security system including a station for receiving input information, which is representative of a user, from the user and generating a first signal responsive thereto (column 6, lines 4-11, for example); a database having a plurality of stored word phrases (column 6, lines 25-29); a database storing biometric models of users (column 6, lines 16-24); and a controller receiving and comparing the first signal to a stored biometric model and validating the first signal if the first signal matches a stored model (column 6, line 66-column 7, line 12), where the controller further randomly selects and forwards a word phrase as a challenge for a user to speak (column 6, lines 25-29), receives and compares with the challenge a spoken

Art Unit: 2137

response to the challenge (column 6, lines 35-65), and verifies the response as matching the challenge (column 6, lines 35-65), and where the controller additionally validates the response if the response matches the stored model (column 6, line 66-column 7, line 12), and the controller issues an authentication signal if both the response matches the phrase and the response is representative of a user (column 7, lines 14-25).

Claims 5 and 7 are directed to methods corresponding substantially to the system of Claim 4, and are rejected by a similar rationale.

#### Conclusion

- 12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Estes et al, US Patent 7158776, discloses a system for voice-based authentication that verifies a user's voiceprint based on a random phrase that the user is given to speak.
- 13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2137

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

740 zad

EMMANUEL L. HOUSE
SUPERVISORY PATENT EXAMINER